

I CLAIM:

1 1. A drill chuck comprising:

2 a chuck body centered on and adapted to be rotated
3 about a longitudinal axis and unitarily formed with a plurality
4 of forwardly open angled guides angularly spaced about the axis
5 and with a rim;

6 respective jaws displaceable along the guides in the
7 chuck body and each formed with a row of teeth;

8 a tightening sleeve rotatably surrounding the body; and

9 a threaded ring rotatable on the body about the axis
10 within the tightening sleeve, fixed to the sleeve, and formed
11 with a screwthread meshing with the teeth of the jaws, whereby
12 rotation of the ring in one direction moves the jaws radially
13 together and opposite rotation moves them radially apart, the
14 ring being formed with a radially outwardly open groove covered
15 by the sleeve.

1 2. The drill chuck defined in claim 1 wherein the
2 tightening sleeve has an inwardly projecting welt engaged in the
3 groove.

1 3. The drill chuck defin d in claim 2 wherein the
2 groove is of rectangular section.

1 4. The drill chuck defined in claim 1 wherein the
2 groove has a floor surface and a pair of flank surfaces, at least
3 one of the surfaces being formed with transverse ridges engaging
4 the welt.

1 5. The drill chuck defined in claim 4 wherein the
2 fl or surface is formed with the ridges.

1 6. The drill chuck defined in claim 4 wherein at least
2 one of the flank surfaces is formed with the ridges.

1 7. The drill chuck defined in claim 4 wherein both of
2 the flank surfaces are formed with the ridges.

1 8. The drill chuck defined in claim 1 wherein the
2 groove has a radially outwardly directed cylindrical floor
3 surface and a pair of outwardly flaring frustoconical flank
surfac s to each axial side of the floor surface.

1 9. Th drill chuck defined in claim 1 wherein th
2 chuck body has a front dge formed with radially extending ridges
3 into which the sleeve is pressed.

1 10. The drill chuck defined in claim 1, further
2 comprising
3 a lock mechanism between the sleeve and the ring.

11. A drill chuck comprising:

a chuck body centered on and adapted to be rotated about a longitudinal axis and unitarily formed with a plurality of forwardly open angled guides angularly spaced about the axis and with a rim;

respective jaws displaceable along the guides in the chuck body and each formed with a row of teeth;

a threaded ring rotatable on the body about the axis, fixed to the sleeve, and formed with a screwthread meshing with the teeth of the jaws, whereby rotation of the ring in one direction moves the jaws radially together and opposite rotation moves them radially apart, the ring being formed with a radially outwardly open groove covered by the sleeve; and

a tightening sleeve rotatably surrounding the ring and formed with an inwardly projecting welt tightly fitted to the groove and axially and angularly coupling the sleeve to the ring.